

CLAIMS:

1 1. A process for evaluating individuals' behavioral capabilities, said
2 process comprising the steps of:
3 defining a set of necessary and sufficient behavioral requirements
4 for a particular role and situation in terms of invariant levels on ordinal scales of
5 dimensions of behavioral capabilities generalizeable to all roles and situations;
6 identifying the behavioral attainments of one or more individuals on
7 the same scales and in the same dimensions used in defining the set of behavioral
8 requirements;
9 comparing levels of capabilities defined as requirements and
10 identified as attainments; and
11 identifying and evaluating each individual's behavioral attainment
12 as a profile of zero, positive or negative differences to levels required for a specific
13 role and situation.

1 2. A process for defining a set of essential behavioral requirements for
2 a particular role and situation, said process comprising the following steps:
3 specifying tasks, each with associated outcomes, required for an
4 individual to meet the criteria of desired performance in the specific role and
5 situation;
6 specifying alternate sets of activities and techniques that may be
7 used to carry out required tasks so as to attain all required outcomes;
8 specifying a set of dimensions of necessary and sufficient human
9 abilities of all types, in a typology of behavioral requirements applicable to all
10 roles in all situations, that are involved in carrying out each of the alternatively
11 required sets of activities and techniques; and
12 specifying the required level of each of the necessary and sufficient
13 abilities.

1 3. The process as defined in claim 2, further comprising the additional
2 step of identifying each dimension of ability that is essentially required at the
3 specified level and that will also contribute to superior role performance at higher
4 levels than required.

1 4. The process for evaluating individuals' behavioral capabilities as
2 defined in claim 1, wherein, for the purpose of matching individuals with the
3 requirements of role situations, said step of comparing levels of capabilities
4 defined as requirements and identified as attainments comprises the steps of:
5 processing data to identify, as possible matches, individuals with
6 attained abilities meeting all the abilities, in one of the alternative sets of required
7 abilities for the role and situation; and
8 identifying individuals, if any, from among those identified above as
9 possible matches, who have attained higher than required levels of abilities in
10 dimensions affecting superior performance in the role-situation.

1 5. An algorithm, for defining behavioral capabilities as a multi-
2 dimensional construct of different types and dimensions of ability elements,
3 comprising a series of steps, each step consisting of a measurement of required or
4 attained ability elements of a particular ability type, each type having a different
5 method of measurement and a unique relationship with the other types in the
6 algorithm and all types in the algorithm encompassing all the types of behavioral
7 capabilities required in all roles and situations.

1 6. The algorithm for the purpose of defining behavioral capabilities, as
2 defined in claim 5, wherein there are the following seven different types of ability
3 elements:
4 one (type I) encompassing cognitive abilities consisting of a level of
5 a particular thinking process applied to a level of knowledge in a specific field;

6 a second (type II) encompassing enabling affective predispositions
7 consisting of a level of particular feeling or attitude associated with some specific
8 object of the affect;

9 a third (type III) encompassing physiological abilities consisting of
10 a particular psycho-motor process resulting in a level of biophysical performance;

11 a fourth (type IV) encompassing strategic abilities consisting of a
12 level of range in alternative strategies implemented and a level of complexity in
13 strategies appropriately addressing issues in situations with ambiguous
14 information;

15 a fifth (type V) encompassing aesthetic abilities consisting of
16 sensitivity to a level of the qualities comprising beauty in a particular mode of
17 sensory input;

18 a sixth (type VI) encompassing ethical abilities consisting of a level
19 of consistency in addressing appropriate concern for others and a level of the skill
20 involved in the addressed concern;

21 a seventh (type VII) encompassing spiritual abilities consisting of a
22 level of appropriate subservience of own interests to further attainment of some
23 metaphysical ideal.

1 7. The algorithm of claim 6 for the purpose of defining required
2 behavioral capabilities comprising the further definition as required abilities, types
3 in the following relationships:

4 type I abilities underlying abilities of all other types;

5 type II abilities underlying abilities of types III, IV, V, VI and VII;

6 type III abilities underlying abilities of types IV, V, VI and VII;

7 type IV abilities underlying abilities of types V, VI and VII;

8 type V abilities underlying abilities of types VI and VII; and

9 type VI abilities underlying abilities of type VII.

1 8. The algorithm of claim 6 further comprising the following steps for
2 defining type I cognitive abilities:
3 identifying both process and content components of the ability;
4 identifying the level of the process on a scale calibrated by
5 behavioral indicators with invariant parameters;
6 identifying the level of the content on a scale calibrated by
7 behavioral indicators with invariant parameters; and
8 identifying the level of the required type I ability as both levels of
9 the process and of the content on respective scales calibrated by behavioral
10 indicators with invariant parameters.

1 9. The algorithm of claim 6 further comprising the following steps for
2 identifying required motivation as a level of type II affective abilities:
3 identifying the individual's perceived probability of succeeding in
4 carrying out the role, tasks and techniques required in the particular situation;
5 identifying an index of the individual's value of the consequences of
6 such success in the particular role and situation;
7 calculating the product of the probability of succeeding identified in
8 step "a" and the index of the value of consequences of success identified in step
9 "b"; and
10 identifying the level of motivation on a hierarchical scale of levels,
11 each higher level corresponding to a contiguous higher continuous range of the
12 product calculated in step "c".

1 10. The algorithm of claim 6 further comprising the following steps for
2 identifying required stress management capabilities as a level of type III
3 physiological abilities:
4 identifying the particular activity in a role and situation wherein an
5 incumbent must endure, without deterioration in his or her other capabilities, the
6 highest rate of perceived change in sensory inputs; and

7 defining some index corresponding to the above identified highest
8 rate of perceived change in sensory inputs as the highest level of an excitement
9 tolerance dimension necessary for the role and situation.

1 11. The algorithm of claim 6 further comprising the following steps for
2 identifying required stress management capabilities as a level of Type III
3 physiological abilities:

4 identifying the particular activity in the role and situation wherein
5 an incumbent must endure, without deterioration in his or her other capabilities,
6 the lowest rate of perceived change in sensory inputs; and

7 defining some index corresponding to the above identified lowest
8 rate of perceived change in sensory inputs as the highest level of a boredom
9 tolerance dimension necessary for the role and situation.

1 12. The algorithm of claim 6 further comprising the following steps for
2 identifying required stress management capabilities as a level of type III
3 physiological abilities:

4 identifying the particular activity in the role and situation wherein
5 an incumbent must endure, without deterioration in his or her other capabilities,
6 the highest situation induced tension; and

7 defining some index corresponding to the above identified highest
8 situation induced tension as the highest level of a tension tolerance dimension
9 necessary for the role and situation.

1 13. The algorithm of claim 6 further comprising the following steps for
2 identifying required stress management capabilities as a level of type III
3 physiological abilities:

4 identifying the particular activity in the role and situation wherein
5 an incumbent must endure, without deterioration in his or her other capabilities,
6 the highest range in perceived rate of change in sensory inputs; and

7 defining some index corresponding to the above identified highest
8 range in perceived rate of change in sensory inputs as the highest level of a
9 functional stress range dimension necessary for the role and situation.

1 14. The algorithm of claim 6 further comprising the following steps for
2 identifying required capabilities in implementing strategies in situations with
3 conflicting, missing or ambiguous information as a level of Type IV strategic
4 abilities:

5 identifying the particular activities in the role and situation which
6 require formulation of strategies appropriately addressing conflicting issues and/or
7 issues with missing, ambiguous and conflicting information; and

8 defining some index corresponding to the largest number of issues
9 in any of the above identified strategies as the highest level of a complexity
10 dimension necessary for the role and situation.

1 15. The algorithm of claim 6 further comprising the following steps for
2 identifying required capabilities in implementing strategies in situations with
3 conflicting, missing or ambiguous information as a level of type IV strategic
4 abilities:

5 identifying the particular activities in the role and situation which
6 require formulation of different strategies to appropriately address the range of
7 incurred issues; and

8 defining some index corresponding to the largest number of
9 different strategies required in any of the above identified activities as the highest
10 level of a repertoire dimension necessary for the role and situation.

1 16. The algorithm of claim 6 further comprising the following steps for
2 identifying required aesthetic capabilities as a level of type V abilities:

identifying the activities in the role and situation which require sensitivity to the qualities comprising beauty in a particular mode of sensory input; and

defining some index corresponding to the highest level of qualities in each particular mode of sensory input identified in the above as the highest level of an aesthetic dimension necessary for the role and situation.

17. The algorithm of claim 6 further comprising the following steps for identifying required ethical capabilities as a level of type VI abilities:

identifying the activities in the role and situation which require skill and consistency in appropriately addressing particular concerns of particular others; and

defining indices corresponding to the highest level attainment of such skill and such consistency identified in the above as the necessary level of aesthetic abilities in the dimension defined by particular types of concerns and others.

18. The algorithm as defined in claim 5 for defining behavioral capabilities, further comprising the following steps for establishing an invariant parameter scale for measurement of each dimension of ability element:

identifying a pool of data items hypothesized as behavioral indicators of different ability levels within the estimated range of abilities in the individuals to be matched;

identifying a representative pool of individuals on whom there exists, or there can be obtained, reliable data on all items identified as behavioral indicators;

processing the data on identified items an individuals utilizing one or more models of item response theory designed to establish invariant parameters on the probability of persons with particular ability levels demonstrating the behavior indicated by each data item and indices of the fit of the data on each item,

14 and of the data on each individual, to the resultant overall scale of ability level
15 indicators;
16 eliminating the data on items and individuals below an acceptable fit
17 from their respective pools and reprocessing the remaining data, continuing to so
18 eliminate and reprocess until all items and individuals remaining in the pools have
19 an acceptable fit; and
20 constructing a scale for the dimension in terms of ability levels
21 indicated by each behavioral item remaining in the pool.

1 19. The algorithm of claim 18 for establishing invariant parameter
2 scales further comprising the following steps for the purpose of anchoring
3 indicators of the highest levels in each dimension:

4 including in the representative pool of individuals for each
5 dimension, individuals with recognized elite behavior attainments in the
6 dimension; and
7 anchoring indicators of the highest level attainment with behavioral
8 items that fit a scale which results in the highest level attainment begin identified
9 for those individuals recognized as having attained the highest levels in the
10 dimension.

1 20. A process for identifying individual's behavioral capabilities as
2 differences between attained levels and required levels of all types of abilities
3 required for any role and situation comprising the following steps:

4 identifying one or more behavioral indicator items of ability levels
5 at and around the required ability level in each dimension on a scale with invariant
6 parameters;
7 obtaining and processing data, in each dimension, on an individual's
8 performance on one or more of the identified items at and around the required
9 level; and

10 displaying a profile or the differences between attained and required
11 abilities.

1 21. The process for identifying an individual's behavioral capabilities as
2 defined in claim 20, further comprising the following steps for improving its
3 predictive validity:

4 obtaining longitudinal data on the success and failure of individuals
5 in the roles and situations with which they have been previously matched;
6 processing of the data obtained in each dimension and the
7 longitudinal data on success and failure to optimize, through affecting changes in
8 the established criteria for acceptable demonstration of required ability levels in all
9 dimensions, the overall validity of predicting individuals' success and failure in
10 real-life roles and situations; and

11 establishing new criteria for identifying attained ability levels for
12 the processing of claim 20.

1 22. The process for identifying particular roles and situations best
2 matching an individual's attainment as defined in claim 4, further comprising the
3 following steps to include consideration of additional factors:

4 collecting data identifying the minimum conditions and
5 consequences of successful performance that the individual finds acceptable in any
6 role and situation;

7 collecting data identifying, from among those conditions and
8 consequences identified as minimally acceptable, conditions and consequences
9 that the individual desires at greater than minimally identified levels;

10 collecting data identifying those abilities which the individual
11 desires to personally attain at improved levels in the future, if any;

12 processing data to identify roles and situations offering conditions
13 and consequences that meet or exceed the individual's minimally acceptable
14 conditions and consequences;

15 processing data to identify roles and situations, from among those
16 meeting or exceeding the individual's minimally acceptable conditions and
17 consequences, with behavioral requirements met or exceeded by the individual's
18 current ability attainments; and
19 processing data to identify a subset, or the roles and situations
20 identified above with behavioral requirements met or exceeded by the individual's
21 attainments, or those requiring abilities affecting superior performance that the
22 individual also desires to improve.

1 23. A process for evaluating interventions targeted at accomplishing
2 increases in individuals' abilities comprising the following steps:
3 defining the levels in all dimensions hypothesized as required prior
4 to the intervention for an individual to attain targeted increases through a
5 particular intervention, including the dimension or dimensions targeted for
6 increase, on scales with invariant parameters for all dimensions;
7 defining the set of non-behavioral, pre-intervention, individual
8 statuses hypothesized as causally affecting the effects of the intervention,
9 defining a hypothesized relationship between pre-intervention
10 ability levels and conditions with attained post-intervention ability levels in the
11 dimension or dimensions targeted for increase;
12 obtaining data on ability levels, in the same set of dimensions
13 hypothesized as required, of a statistically significant number of individuals
14 before, during and immediately after the particular intervention, all on the same
15 scales used to define requirements;
16 obtaining data on the pre-intervention conditions, hypothesized as
17 affecting intervention effectiveness, or the same individuals on which ability level
18 data has been obtained;
19 processing the data on ability levels to determine the statistical
20 probability of the particular intervention, and of the individual's prior attainment
21 of hypothesized pre-intervention requirements, affecting post-intervention

22 increases in an individual's levels of abilities attainment, for individuals with
23 different ranges of pre-intervention ability attainments and conditions; and
24 comparing the statistical probabilities of the particular intervention's
25 affects with an average probability of the affects of all interventions targeting
26 individuals with similar pre-intervention abilities and conditions and similar post-
27 intervention ability attainments.

1 24. A system for matching individuals with the behavioral requirements
2 of particular roles in situations, said system comprising:

3 means for entering and storing data on individuals using the system,
4 including their identity and their performance of indicators of the attainment on
5 scales with invariant parameters of all types behavioral capabilities as required for
6 any role and situation;

7 means for entering, storing, selecting and carrying-out statistical
8 procedures with which to establish the characteristics of and between behavioral
9 indicator items, individuals and individuals' performance of behavioral indicators;

10 means for entering and storing data on role situation requirements;

11 and

12 means for comparing data on one or more role situation
13 requirements with data on one or more individuals.

1 25. The system as defined in claim 24 for matching individuals with
2 behavioral requirements further comprising for the purpose of evaluating the
3 probable effects of interventions targeted at the improvement of individual's
4 specific capabilities:

5 means for entering and storing data on specific interventions
6 targeted at the attainment-improvement of individuals including data on the levels
7 of targeted and ancillary domain-type abilities of specific individuals prior, during
8 and after the intervention;

9 means for entering, storing selecting and carrying out statistical
10 procedures with which to establish relationships between individual with specific
11 entry characteristics and the specifically targeted ability attainment-improvements
12 of individuals during and after specific interventions; and
13 means for calculating the probable effects of one or more
14 interventions on individuals with specific entry characteristics.

1 26. The system as defined in claim 25 further comprising for the
2 purpose of including expert-system capabilities:

3 means for entering and storing longitudinal data on the success and
4 failure of individuals in the roles and situations with which they have been
5 previously matched;

6 means for entering, storing, selecting and carrying out iterative
7 statistical procedures with which to generate, and evaluate the effects of alternative
8 criteria in the procedures for matching individuals with roles and situations;

9 means for identifying the set of alternative criteria which maximizes
10 the overall predictive validity of procedures for matching individuals with specific
11 roles an situations and with specific attainment-improvement interventions; and

12 means for implementing changes in criteria to maximize the overall
13 predictive validity of procedures for matching individuals with specific roles and
14 situations and with specific attainment-improvement interventions.

1 27. The system as defined in claim 24 further comprising for the
2 purpose of assuring operator identity or preventing unauthorized access to any of
3 the system's operations:

4 one or redundant means for identifying the operator as an individual
5 being matched, or as a person authorized to change requirements for a specific role
6 and situation, or as person authorized to change requirements for a specific
7 attainment-improvement intervention, and

8 means for locking out access to particular aspects of the system's
9 procedures according to the identification or the operator.

1 28. The system as defined in claim 24 further comprising for the
2 purpose of increasing the system's flexibility and effectiveness with selectable
3 interaction options:

4 means for electronically storing and accessing audio, video or
5 textual presentations designed to elicit from system operators behavioral indicators
6 of a level of ability attainment in one or more dimensions;

7 means for selecting segments calculated to maximize the probability
8 of obtaining valid data on behavioral indicators relevant to matching the operator
9 with a role an situation, to matching the operator with an attainment-improvement
10 intervention or to providing the operator with an optimum challenge to
11 demonstrate an increased ability level in one or more dimensions.

12 means for presenting selected segments to the operator including
13 one or more speakers and/or earphones for audio and/or a cathode ray tube, crystal
14 display and/or printer for video, graphics or text; and

15 means for operator inputting behavioral indicators in response to the
16 presentation including a microphone for voice responses and a keyboard, mouse or
17 light pen.

1 29. The system as defined in claim 28, wherein said electronically
2 storing means includes a series of scenario segments in which the operator
3 assumes a role and the operator may intervene in that role at anytime or in any
4 manner, said actions and inactions constituting behavioral indicators of the
5 operator's abilities attainment.

1 30. The system as defined in claim 28, wherein said selecting means
2 additionally includes means to select presentations representing a just right
3 challenge, neither too easy or boring nor excessively difficult an frustrating.

1 31. The system as defined in claim 29, wherein said series of scenario
2 segments are selected to present the operator with situations in later segments that
3 are specific consequences or the operator's interventions in earlier segments.

1 32. The algorithm as defined in claim 18, wherein the step of
2 identifying a pool of data items hypothesized as behavioral indicators further
3 identifies elapsed times for response to differentiate levels in an ability dimension.

1 33. The algorithm as defined in claim 18, wherein the step of
2 identifying a pool of data items hypothesized as behavioral indicators further
3 identifies levels of tension while demonstrating the behavioral indicator to
4 differentiate levels in an ability dimension.

1 34. The algorithm as defined in claim 18, wherein the step of
2 identifying a pool of data items hypothesized as behavioral indicators further
3 identifies locations and characteristics of brain waves while demonstrating the
4 behavioral indicator to differentiate levels in an ability dimension.

1 35. The process as defined in claim 20 for obtaining data on the
2 behavioral attainments of individuals further including unobtrusive monitoring of
3 changes in an individual's tension level while demonstrating a behavioral indicator
4 of a level of attainment in a dimension of abilities.

1 36. The process as defined in claim 20 for obtaining data on the
2 behavioral attainments of individuals further including the unobtrusive monitoring
3 of changes in the individuals brain waves while demonstrating a behavioral
4 indicator of a level of attainment in a dimension of abilities.

1 37. The process as defined in claim 20 for obtaining data on the
2 behavioral attainments of individuals further including the following step to
3 protect against the wrong person being credited with an ability attainment:
4 processing performance data on each individual being appraised to
5 identify unique anomalies in data obtained on one or more of the behavioral
6 indicator items;
7 confirming that the data on a unique anomaly attributed to an
8 individual is reliable; and
9 comparing the unique characteristics in the performance data of
10 each individual being appraised with a previously compiled database of
11 individuals' unique characteristics to assure proper identification of the individual
12 and to protect against the wrong person being credited with an ability attainment.

1 38. The system to assure operator identity as defined in claim 27,
2 wherein the means for operator identification includes means of processing
3 operator voice responses through a method of speaker verification in one or more
4 languages.

1 39. The system as defined in claim 24 wherein the means for data entry
2 includes means of processing operator voice responses through a method of speech
3 recognition in one or more spoken languages.

1 40. The system as defined in claim 24 wherein the means for data entry
2 includes means for inputting and processing data from various devices requiring
3 limb or body movements for obtaining data on physiological abilities.

1 41. The system as defined in claim 24 wherein the means for data entry
2 includes means for timing and evaluating timing data on behavioral indicators
3 requiring a specific time interval for operator responses.

1 42. The system as defined in claim 24 wherein the means for data entry
2 includes means of inputting and processing the operator's tension levels during the
3 process of demonstrating behavioral indicators requiring a specific minimum or
4 maximum change in tension during operator responses.

1 43. The system as defined in claim 24 wherein the means for data entry
2 includes means of inputting and processing the operator's brain waves during the
3 process of demonstrating behavioral indicators requiring specific brain waves
4 during operator responses.

1 44. An apparatus for unobtrusively obtaining transcutaneous data on a
2 computer operators' tension levels simultaneous with performing specific
3 computer operations, comprising imbedding transducers into surfaces of a
4 computer mouse, joystick, tracking ball, earphone or any other computer device
5 involving contact with the operators skin.

1 45. An apparatus for unobtrusively obtaining data on an individual's
2 brain waves associated with specific computer workstation operations, comprising
3 imbedding transducers into surfaces of a headband holding earphones to generate
4 transcutaneous data suitable for processing into a determination of the location,
5 shape and timing of brain waves simultaneous with such computer or workstation
6 operations.

1 46. An algorithm to identify the relative stressor levels of mediated
2 presentations, for the purpose of considering the tension inducing effects of such
3 presentations upon media users, comprising the following steps:
4 identifying the required behavioral capabilities, other than stress
5 management related, for appropriate user response to each of a multiplicity of
6 presentations;

7 identifying a multiplicity of individuals with reliable data on their
8 respective attainment of the required behavioral capabilities, other than stress
9 management related, for appropriate user response to the multiplicity of
10 presentations;

11 obtaining data on the tension experienced by each individual and the
12 responses of each individual while interacting with each of the presentations;

13 processing the data on identified presentations and individuals,
14 utilizing one or more statistical techniques, to establish one or more hierarchical
15 relationships among the individuals of their relative vulnerability to tension
16 inducement, hierarchical relationships among the presentations or their relative
17 stressor levels and indices of the fit of the data on each individual and on each
18 presentation to the statistically derived theoretical model on which the established
19 hierarchical relationships have been predicated;

20 eliminating the data on individuals and presentations below an
21 acceptable fit and reprocessing the remaining data, continuing to so eliminate and
22 reprocess until all remaining individuals and all remaining presentations have an
23 acceptable fit to a statistically derived model for establishing hierarchical
24 relationships of tension vulnerability among individuals and stressor levels among
25 presentations;

26 constructing a scale, for one or more relationships between
27 presentation required an individual attained capabilities other than stress
28 management related, relating known individuals' tension vulnerability and known
29 presentations' stressor level; and

30 identifying the unknown stressor levels of particular presentations
31 on the scale through reference of the tension induced by the particular presentation
32 in individuals of known tension vulnerability.

1 47. The system as defined in claim 31 wherein said operator at one
2 workstation can be electronically linked to one or more operators, each at their
3 own workstations, through a linkage means which processes information from and

4 to the linked workstations according to established protocols for differentiated
5 roles of the particular operators at each of the workstations.

1 48. The system as defined in claim 31 for said selecting of scenario
2 segments with specific stressor characteristics, further comprising the means for
3 employing the algorithm and data processing steps of claim 46.

1 49. The method for the purpose of simultaneously evaluating the
2 capabilities of specific service providers and specific individuals being serviced
3 and the effectiveness of specific services, comprising the following steps:

4 defining the various tasks, techniques and underlying abilities
5 required of an individual in a specific service provider role and situation in
6 accordance with the method of claims 2 through 19;

7 designing data entry procedures to document the specific services
8 provided specific individuals including the basis for any analyses and prescriptions
9 and for interim and final evaluations of service effectiveness;

10 redefining the levels of the various underlying service provider
11 abilities indicated by correct data entry for individuals with various specific
12 profiles of pre-intervention abilities and with various targeted improvements of
13 abilities with the method of claims 18 and 19;

14 processing of data obtained through entries of service provider and
15 individual being serviced to determine respective levels of indicated abilities in
16 accordance with the method of claims 20 and 21; and

17 processing of data to evaluate service effectiveness in accordance
18 with the method of claim 23.

1 50. The method for the management of attainment-improvement
2 intervention providers as defined in claim 49 including the following additional
3 steps:

4 collecting data on the cost of the attainment-improvement
5 intervention provided each individual by providers being managed;
6 collecting data on the time period between initiation and completion
7 of each intervention in terms of the elapsed number of days and the total contact
8 hours between providers and the individual provided intervention services;
9 collecting longitudinal data on the maintenance and further
10 improvement of attained abilities after intervention services are terminated;
11 collecting data on the overall satisfaction of the individuals provided
12 intervention services; and
13 analyzing data on the abilities and status of individual before during
14 and after the intervention with the data collected on costs, time, post-intervention
15 abilities maintenance, post-intervention abilities improvements and overall
16 satisfaction to establish the quality, service time and cost of intervention services
17 of each provider and each group of providers subject to management
18 responsibility.

1 51. The system as defined in claims 24 through 31, 37 through 43 and
2 47-48 wherein all information used to elicit and process operator responses is
3 stored at a central location and downloaded into an operator's workstation through
4 dedicated or public communication lines including, but not limited to, satellite
5 communication links and the world wide web.